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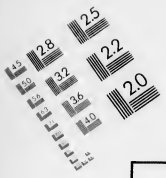

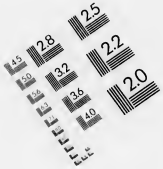

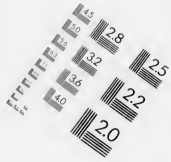

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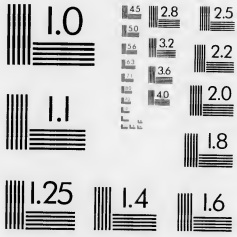

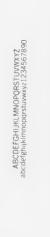

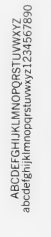

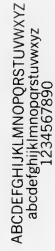

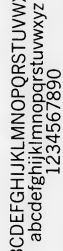

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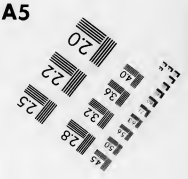

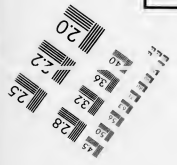

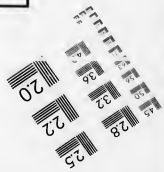

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Syllabus of Introductory Economics

C. M. Lacey Sites

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Syllabus of

Introductory Economics:

comprising

Production, Value and Distribution

by

C. M. Lacey Sites

薛來西編纂

Published by

Nanyang College, Shanghai

上海南洋公學印行

PRINTED BY THE
METHODIST PUBLISHING HOUSE, SHANGHAI, CHINA.
LACY AND WILSON

To the Memory of my Father
Nathan Sites

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承
恩

WHOSE LIFE WAS DEVOTED
TO THE WELFARE OF CHINA:

And to my Mother

WHO SHARED HIS GOOD WORKS
AND WHOSE LIFE IS STILL
A LABOR OF LOVE

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PREFACE

This syllabus is intended to be used merely as a series of texts. The aim is to furnish the student with the terminology of the subject and with accurate statements of essential notions, leaving explanations to be supplied by the teacher orally and examples to be elicited chiefly from the students themselves.

These pages consist of little more than a teacher's lecture-outlines, thrown into sentence-form to serve as a student's handbook. Examples are omitted—except where the meaning could not be made clear without them—in order to minimize the temptation to the student to take an example because "it is written," and learn it by rote. Should there be passages which do not sufficiently suggest examples for themselves, the writer would be happy to correspond with teachers respecting facts which underlie and illustrate the statements of the text; or, resort may be had to standard text-books. The syllabus cannot be used as an ordinary "text-book," but only as an adjunct to oral teaching.

The plan of work that has been found most satisfactory is to take the latter part of a recitation period for developing the new topic. The text is presented and explained, and one or two illustrative examples are drawn out from the class. At the next lesson each student brings in a paper on which he has written, in his own words, the principles of the topic, with examples based on his own observation or previous knowledge. This hour is spent in criticising, reciting, comparing, and blackboard work on definitions, classification and outline. On the third day, the students bring in their note-books in which the whole lesson has been rewritten in accordance with the corrections and suggestions made on the

second day. These note-books are looked over by the teacher, with additional discussion, during the first part of the hour; in the latter part of the hour a new topic is developed, as stated above. This gives two days to a topic.

The course is conversational and introductory. The syllabus is for Chinese students of English who are not yet proficient in that language but who have some maturity of mind. The aim is, therefore, to make the style plain without being juvenile and to make the treatment fairly comprehensive but not exhaustive.

The study of formal "laws" of economics, and the applications of economic principles to practical problems, are reserved for later work. Only the most essential notions are presented here,—and in such form that the student may be expected to master every word of the text.

It is hardly necessary to add that ideas and illustrations are borrowed freely from recent writers on economics. Two of the most helpful are Professor Marshall, of Cambridge, and President Hadley, of Yale. Chinese terms are added, in Part I, where they seemed likely to be useful. For the more theoretical work of Parts II and III, they are omitted from the syllabus for the present, because of uncertainty as to the proper terms. In class-room work, however, students are called upon to suggest Chinese terms, with a view to making their concepts more definite.

C. M. L. S.

Nanyang College,

May 10th, 1904.

Syllabus of Introductory Economics

SYNOPSIS

PART I—THE PRODUCTION OF WEALTH. (卷一生財)

Section I (第一節萬物)
Nature as a source of production

Section II (第二節人工)
Labor as a source of production

Section III (第三節母財)
Capital as a means of production

Section IV (第四節布置)
Organization of Industry, as a means of production

Section V (第五節社會)
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Section I (第一節需要)
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Section III (第三節工價)
Wages for Labor

Section IV (第四節地租)
Rent for the use of Land

INTRODUCTION

The English word ECONOMICS is taken from the old Greek language. Originally it was made up of two Greek words and meant the regulation of household property (治家之法). It is the ordinary business of men to use what they have so as to make a living for themselves and their families (身家之生計). In studying Economics, we shall find that the study is based upon careful observation of men's actions in the ordinary business of life (職業). The science of Economics is also called POLITICAL ECONOMY (國計學), because it concerns the whole State (國家).

Give exact meanings in English for various Chinese terms used to denote this science: 理財, 富國策, 原富, 計學.

Give other Chinese expressions used to denote this study,—and quote a few passages from the old books, to illustrate their economic teachings.

What do men want? How do men get what they want? How do men help one another in getting what they want? How do they divide up what they get? How do they use what they have got? Write answers to these questions, giving as many different varieties of facts as you can, from your own observation.

Whatever men may want and can get and can own and can exchange with other men, may be called WEALTH (財). Nature furnishes many things, but men are continually taking these things and, by labor, making them more suitable to gratify their wants. More wealth is thus created. This process may be called PRODUCTION (生財). Different men produce different kinds of wealth. Then they give a part of what they have, to get a part of what others have: this may be called EXCHANGE (交易有無); and the amount

of wealth for which a thing can be exchanged may be called its VALUE (物値). The way in which the value of a thing is divided up among those who have helped to produce it, may be called DISTRIBUTION, or the sharing of the value (分財).

Many other sciences are helpful in the study of Economics: such as Psychology, which deals with the operations of man's mind, and Physiology, which deals with the operations of man's bodily organs; also the various natural sciences, by which men can learn much about the materials and forces of nature, and the use of them.

PART I

The Production of Wealth

(生 財)

PART I

The Production of Wealth (生財)

DIFFERENT WAYS OF PRODUCING WEALTH

In answering the question: How do men get what they want?—we may first consider the general ways in which wealth is produced. The most important ways in which men get wealth are these:

(1) By EXTRACTING (求自然之利) or taking directly from nature, as in cultivating the soil, mining, etc.; (2) by TRANSFORMING (製煉), or changing things to a different form, as in manufacturing; (3) by TRANSPORTING (轉運) or taking things from one place to another, as in carrying by cart and boat; (4) by TRANSFERING (經商), or changing the ownership of things, as in selling things in market. All these different ways of getting wealth may be called PROCESSES OF PRODUCTION (生財之法) because things are thus made more suitable to gratify wants, that is, the value of things is increased.

SOURCES, MEANS AND HELPERS OF PRODUCTION

Nearly all wealth is got, either directly or indirectly, from nature, by man's labor. These two may therefore be called the chief sources of wealth. Anything that takes part in producing wealth may be called *an agent of production*. We shall consider other agents of production afterward. Now we shall consider the two primary agents of production (生財正用之源), namely, Nature and Labor.

SECTION I

Nature as an agent of production

Nature (萬物) is the basis of production. Even the bodies of men are produced by the operations of nature; and the physical life of men is maintained from nature. The surface of the earth affords men a place where they can live and work. But we must now consider nature as distinct from man. In considering nature as a source of wealth we may consider (1) natural materials (天然之物質) and (2) natural forces (天然之物力).

NATURAL MATERIALS

These may be grouped in two great classes: inorganic (無機) and organic (有機). INORGANIC materials are those that have no life in themselves: they are furnished by nature in various forms—solid, liquid and gaseous. They include all the *substances* that make up natural wealth of every kind. They include not only the various "elements" that chemists have discovered, but especially the combinations of these in such forms as air, water, the soil, stone, minerals, mineral oil and natural gas.

ORGANIC materials are those that have life; they are in two great classes, *vegetal* (植物) and *animal* (動物). Since we are now considering only what nature furnishes without the help of men, we must not include here cultivated plants and domesticated animals, but only those that grow wild. These organic materials include the *original* (原始) seeds and "cuttings" of vegetables and trees from which men have developed better varieties by cultivation; they include the wild animals that men have originally captured and tamed for use and for breeding; but they also include much that is taken *directly* from nature (自然之利), both animal and vegetal, for present use.

The importance of various natural materials, in economics, depends chiefly upon their *suitability* to gratify men's wants, upon the *quantities* of them, and upon the question whether or not they can *readily* be made usable.

NATURAL FORCES

Of all the various kinds of natural forces, of which we learn in the studies of Physics (物理學), Chemistry (化學) and Biology (生物學) there are probably none that cannot be used in some way, for the production of wealth.

PHYSICAL FORCES: Perhaps the one most commonly observed is *Gravitation*. In its wider scope this force is one of the forces that keep the planets (including the earth) in their proper orbits and so give us the regular succession of seasons: it also causes the tides. In its narrower scope, that is, in the tendency of this force to draw weighty bodies toward the center of the earth, gravitation gives us the force of falling bodies, of running water, of the winds, and buoyant energy of many sorts. These simple forces were especially used by men in the early history of the world. Later, men learned to make more use of the wonderful force of *Heat*, especially as shown in its power of turning a liquid into a gas; this gives us the tremendous energy of steam. In recent years, the mighty forces of *Electricity* and *Magnetism* have been much used.

CHEMICAL FORCES: The tendencies of different substances to unite in chemical combinations are of vast importance in production. *Chemical changes* in substances, are especially helpful in many branches of manufacture, that is, in "transforming," and in agriculture. One of the physical agents, in addition to those already mentioned, that may be employed to bring about chemical changes is Light. Some chemical changes result in suddenly setting free certain gases which tend to expand so much that they push with great

force against anything that is in their way; by arranging things suitably beforehand, this force may be utilized for very important purposes.

VITAL FORCES: The vital principle, in *vegetal life*, is at the basis of what is called the "productiveness of the soil." When the seed has been planted and begins to grow, the plant-life assimilates inorganic materials, that is, it turns them into its own substance. Thus all vegetal materials are prepared for the use of men. Minute organisms, both vegetal and animal, growing in other bodies or substances, often produce profound changes that are of great economic importance. The *energy of animals* is of great importance in production; their strength, their speed, and various other qualities, have been used by men from the earliest times, in a great variety of ways. (Even more important is the use of animals for food, the use of their fur for clothing, etc.) The *reproductive powers of animals and of plants* are also of the highest importance in propagating the species and in making improved varieties possible.

The importance of the natural forces, in economics, consists in this: that they not only *take the place of men's strength*, but even accomplish work that human power could never accomplish. When men make nature do the hard work, they may use more of their own energy in devising still better ways to use nature. Thus new uses of natural forces are continually being found and even new forces are being discovered. Other natural forces may yet be discovered, more powerful than any that are now known.

SECTION II

Labor as an agent of production

Labor (人工), in economics, means human exertion, of any kind, for production. Without some exertion of man's energy, all that nature furnishes would be practically useless. Even where fruits grow wild, men must go to them and take them before they can use them; so, too, in the case of wild animals, and "free" gold, and other natural materials. If a man wants to use the force of a river-current or of the wind, for transportation, he must first get some kind of boat or sail, and this requires labor.

If we try to classify labor, we may do it in at least two ways: according to the kind of effort (作工之法), and according to the object of the effort (作工之故).

THE KIND OF EFFORT: All labor that is worth anything requires some exertion of the mental powers; but in certain branches of labor the exertion is almost entirely mental; in others, less mental effort is required, and the exertion is chiefly muscular. In considering various kinds of labor, therefore, it may be convenient to classify them according to whether the exertion is *chiefly mental* (勞心多而勞力少) or *chiefly muscular* (勞力多而勞心少).

THE OBJECT OF THE EFFORT: Some labor is devoted to finding out the resources of nature and the best ways of using them: this may be called *invention or discovery* (攷索物之體用). Some labor is devoted merely to *taking possession* of natural materials that are ready at hand (據無主之物). Some labor is devoted to *taking out* natural materials from where they are stowed away; some to *utilizing the productive powers* of nature, as in cultivating the soil and rearing animals: these efforts may be called *extraction* (求自然之利). Large classes of laborers are engaged in the *transformation*

(製煉) of materials; this includes all the varieties of manufacture. Other classes of laborers are engaged in *transportation* (轉運), the carrying of people and things from one place to another. Some are engaged in the *transference of ownership* (經商), that is, they collect things in suitable quantities and sell them to persons who want them. Besides those who are directly engaged in labor, of each of these classes, there are many others who *help indirectly* (輔助) to accomplish the same objects: such as those who direct the laborers, those who keep accounts, those who carry messages, also the watchmen and common servants who are connected with places where work is done.

In addition to all these classes of labor, there are others whose object is to produce better men: these may include all persons engaged in the work of *imparting instruction* (訓迪) whether the work be the training of body, mind or soul. Since the purpose of imparting instruction is to make men more efficient, this may be regarded as productive labor. It is even more urgently important to develop the resources of man (人才) than of nature, because when a man's powers are well trained, he can use nature all the more effectively.

The importance of labor as an agent of production depends partly upon the *supply* of it—that is, the number of people (人數); and partly upon its *efficiency* (才幹)—that is, the ability of people to do things. The intelligence and skil of a few men may count for much more, in the production of wealth, than the physical strength of many men.

That labor is most productive which is most efficient in taking what nature gives or what men have produced and changing the form or place or method of it so as to make it most available for the service of men.

The number of people on the earth tends to increase, from generation to generation; but the crust of the earth,

from which men get most of their subsistence, does not increase in extent. It may therefore be important to consider such questions as these: Can the supply of animal and vegetal products, that men use, be increased sufficiently to meet their increasing needs? And will men probably be able, with new inventions, to supply a considerable part of their wants by changing the forms and combinations of inorganic materials, so that they need not depend, for sustenance, so much upon animal and vegetal life?

SECTION III

Capital as an agent of production

We have considered Nature and Labor as sources from which wealth is produced (生財之源). We are now to consider some MEANS (生財之法) by which nature and labor may be made more productive. Of these the most important is Capital (母財, 資本). If we observe carefully any of the processes of production, we shall see that there are other causes that help, besides nature and labor. In almost every kind of industry, men use *implements* (用具): we may take this word in rather a broad sense, to include all forms of wealth which are used as means for accomplishing work.

By means of *tools*, men can use their own powers more productively. By means of *engines*, the forces of nature can be used more productively. By means of *machines*, either the powers of man or the forces of nature can be applied so systematically as to produce great results in accordance with a certain plan. *Buildings* in which work is carried on, "*fixtures*" of various kinds connected with them, and "*permanent improvements*" on land, may also be included among the means of production. These forms of capital, when they have once been provided, may be used *over and over again* for a considerable time without being entirely used up.

Capital also includes those means of production that are used up at once. Fuel used to drive an engine; seed that is planted or sown in the ground; raw materials used in manufactures; the goods that a merchant sells for profit; the money that an employer pays out as wages;—these kinds of capital, so far as concerns their actual forms and their present owners, are used *once for all*.

It may, therefore, be convenient, for some purposes, to classify capital as FIXED CAPITAL (永久之母財) and CIRCULATING CAPITAL (循環之母財). We shall see, however, that there are also other ways in which it may be classified.

These various kinds of capital are not merely products of nature: they are products of nature that have been made useful by labor and have been *kept* for future use. Moreover, these various kinds of capital are not merely wealth, but wealth that is intended to help in *producing additional wealth*. The wealth that we call capital is used to gratify wants not directly and immediately, but indirectly and in the future. Capital is thus the joint result of nature, labor and *abstinence*, (惜財, 節用), applied to the production of more wealth.

The kinds of capital mentioned above may all be called MATERIAL CAPITAL (有形資本). But there are other kinds of capital, that cannot be seen or handled, which may be called IMMATERIAL CAPITAL (無形資本). Immaterial capital includes the useful *abilities* of a man, and the skill, knowledge, etc., that he has got by effort or by spending time or money. The *good reputation* of a business house, obtained by a long record of well-doing, and which attracts customers and secures confidence, may also be called immaterial capital.

Usually we think of capital as belonging to private persons (or companies of private persons); in such a case the gain resulting from its use, is expected to go to the particular persons who invested their wealth. Such investments may be called PRIVATE CAPITAL (個人之母財). But much wealth is sometimes invested by the community, with the expectation of a general benefit which may not be enjoyed by particular persons in proportion to what they gave. Such investments may be called SOCIAL CAPITAL (公共之母財).

Money is important as capital, only as it represents "money's worth". Money, invested in an industry, is productive only as it is spent for productive things.

The importance of capital lies in its *reproductive* power. In a progressive country, more and more capital is always

being accumulated in permanent forms. Thus, every generation has more productive wealth than the last. Moreover, new inventions are continually making capital more productive than before. Thus, even though land and natural materials be limited in supply, the production of wealth may still for a long time, increase more rapidly than the needs of the increasing population of the earth.

SECTION IV

Organization of industry, as an agent of production

If we observe the working of a large factory, we shall see that there is a regular *method*, or plan, about it. A number of men, by working together, can often accomplish much more than if they were working separately and independently. What is done is not simply labor, but labor in pursuance of an extensive *plan*. It is not simply the use of capital; it is *managing* so as to use capital as effectively as possible. Such planning and managing may be called the organization of industry (布置生財之法).

Since Capital and Organization (財財與布置) are used to produce wealth and are themselves products of labor, we may called them SECONDARY AGENTS OF PRODUCTION (生財副用之法). Capital is wealth used *to produce* wealth. Organization is labor used *to increase the productiveness* of other labor, as well as of capital.

ORGANIZATION OF INDUSTRY INCLUDES:—1. COMBINATION OF LABOR (同力合作): This means the bringing of the efforts of a number of men into simultaneous action at a particular point and for a particular object. There are tasks that could never be performed by one person alone, no matter how long a time he took, because they require the exertion, at a certain time and place, of more powers than one man possesses. There are other tasks that one man might perform alone, but which could cost much more time and labor than if several men worked at them at once. The principle of combination of labor was formerly more important than at the present time, in the case of tasks requiring much physical strength; because engines and machines have now been invented to do, by the use of nature's forces, much that was formerly done by human effort.

2. Division of Labor (分功): This is one of the most important principles in all political economy. It is the dividing up of the work to be done, letting some people do one part, others another part, and so on,—but it is so arranged that the work of these various people or groups of people shall, together, accomplish a particular result. We may note three important sorts of division of labor.

(1) *Division of labor according to places* (因地制宜): Some regions are especially adapted to the production of certain things, others to the production of other things:—if each region gives especial attention to producing the things for which it is best adapted, the total product will be greater than if each region had to produce every kind of commodity, itself: then, by a system of exchanging (通工互市), the advantages may be shared by all. This species of division of labor is chiefly due to arrangements made by nature,—such as climate, physical geography, the quality of the soil, etc.

(2) *Division of labor according to groups of people* (才能遞嬗): Some groups of people have special abilities in certain branches of industry,—chiefly as a matter of heredity or early association. This arrangement is therefore partly natural and partly intentional, and it may be made advantageous to people generally, as in the preceding case (1).

(3) *Division of labor among individuals* (各分工作): This is largely intentional; and in the great modern schemes of production, it is a matter of the most careful planning and managing. It means that in the production of a thing—especially a thing that requires a considerable variety of work to finish it—the work is all divided up among several men so that each man shall have one special thing to do. In making a certain article, one man may begin the work, then hand it over to the next man to continue, and so on, until it is finished. In this case, the different men work in succession.

(Contrast this with "Combination of labor.") Again, different parts of a complex article may be made by different men or different sets of men and finally be put together, complete; the different parts of the work in this case, may, or may not, be done at precisely the same time. In all these cases, somebody has planned the work, and directs it so that the labor of several men can be united to form a certain product.

These three sorts of division of labor may often be more or less *mingled;* and the principle of "division of labor among individuals" may often be applied in a *less formal* way. Every artisan who works at his particular trade, and every business man who deals in his own particular kinds of goods, is applying the principle of division of labor. The same is true when a man plans his hours of work so that he can keep at one kind of work steadily for a considerable time before he begins to do something else.

The *reasons* why division of labor increases the production of wealth, are summed up by Adam Smith under three heads: (1) "The increase of dexterity in every particular workman;" (2) "The saving of the time which is commonly lost in passing from one species of work to another;" (3) "The invention of a great number of machines, which facilitate and abridge labor, and enable one man to do the work of many."

At the beginning of Adam Smith's book, "*The Wealth of Nations*" (原富), this subject is clearly explained.

3. Production on a large scale (本寬利巨). This is closely connected with the principle of division of labor among many individuals under a single management. If a number of men are employed on different parts of a piece of work, it must be arranged so that there will be work enough to *keep them all busy;* for if many men are idle for even a short time, there will be a considerable loss in wages. Conversely, the greater the *volume of work*, the more completely can the principle of division of labor be applied.

Also, in any good-sized business, there are many *items of expense* which would need to be *increased only a little* if the volume of business were increased a good deal: especially the expense of high-grade business management, or "wages of superintendence;" and, to some extent, the expense of the "plant" (難移之用物). If a factory does business enough to keep it running both night and day, then the *capital* that has been invested in the "plant," is utilized nearly *twice as productively* as if the factory were running only in the daytime moreover, in this case, such of the "circulating capital" as is invested in raw materials, can be *"turned over"* more speedily, and thus also interest can be saved.

Many great industrial establishments find that it is economical to carry on *subsidiary industries* (輔助職業) in connection with the principal industry, so that everything needed to make the product ready for market may be provided in the one establishment. This is, in one respect, contrary to the principle of division of labor; because different kinds of industries are carried on under one management;—but if the production is on a large scale, so that the subsidiary industry can be properly organized, the one establishment may gain the *profit of both industries;* and it will also have the advantage of getting the incidental things done in *just the way they are wanted.*

When production is on a large scale, the raw materials and other articles used in production can be *bought in large quantities* and therefore at lower cost. In selling the product, the *expenses* of advertising, packing, shipping, collecting debts etc., are likely to be *proportionably less*, when the business is large.

2. BUSINESS MANAGEMENT (職業之經營) This refers to the actual work of *planning and managing* so as to use labor and capital most productively—as in the ways we have just described. It applies to every manner of producing:

whether extracting, transforming, transporting, or transfering: and it includes the planning and *supervision* of all sorts of arrangements to make the cost of production less and the value of the product greater.

Business management comprises such special functions as the following: *providing* the necessary money capital (資本); *preparing* the "plant" (that is, the material equipment for the industry); *engaging* the necessary laborers; *buying* raw materials (生貨) or other things essential to the business; *superintending* the laborers at their work; *keeping* the "plant" in good condition; *selling* the product (here advertising is included); keeping accurate *accounts* of all expenses and income; and *knowing* all about demand, supply, prices, risks, and other matters that affect the business.

In a small industry, all these things may be done by the proprietor himself, who may, himself, be a laborer too. In *great businesses*, especially when they are owned by many people in the form of *joint-stock companies* (合股公司), the work of business management is very much "specialized" and requires peculiar ability (特才). For this reason, although it is, of course, a form of labor, we have considered it separately. Upon the efficiency of this labor the results of all the other labor depend.

SECTION V

Society as a helper of production

The production of wealth is greatly helped by the fact that there are many people in the world and that they are more or less closely associated. Most of the people on the earth are grouped in nations; and they ordinarily live in smaller groups, such as cities, towns, villages, etc. When people are associated rather closely and permanently, and have MUTUAL INTERCOURSE (互相往來), they may be said said to form a SOCIETY (合羣, 社會).

The fact that many men have lived upon the earth in *previous generations*, and that they thought and worked and accumulated capital, is also an important help to present production.

If there were only one family in a place and they had no dealings with others, there could not be much division of labor; production could not be on a large scale; in short, they would lack nearly all the advantages of "ORGANIZATION." Moreover, production on a large scale is useless unless there are *many people to use the goods* produced.

Where there are many people living near together, who are likely to buy things, MERCHANTS are apt to establish stores there, in which everybody can *buy conveniently:* the buyer can thus get what he wants at much less expense than if he had to send a long distance for it; and the merchant can afford to sell at a moderate rate of profit because many people are there to buy; he can therefore *sell a great deal of goods* without spending too much time and trouble.

When many men have dealings with one another, in industrial matters, the *large amounts of capital* needed for GREAT ENTERPRISES can generally be got much more readily than if men lived apart.

When men meet other men from various places, they get NEW IDEAS; they learn to enjoy new things; they learn to make things better; and they are likely to be led to think of new and better ways to use natural materials and forces.

When the people of two places begin to have much intercourse with one another, so that there are large numbers of people or large quantities of goods to be carried back and forth, BETTER MEANS OF TRANSPORTATION will probably soon be provided. The carriers will find it profitable to use improved methods because they can thereby do business *more quickly* and *more satisfactorily* and also *on a larger scale.* The public will have all these advantages and probably at a *lower price* than before; because the carriers will try to attract many customers and will therefore usually charge a reasonable rate.

Thus, in various ways, the "SOCIAL DEMAND" leads to economies and conveniences; and the user shares the advantage with the producer. Thus "society" helps all branches of production, and helps to increase the usefulness of all the agents of production.

SECTION VI

Government as a helper of production

Another help to production is good government (政善則民安而富). The greatest service that the government can render to industry and enterprise is to *repress disorder* and *protect the people's rights*. These rights include the right of every man to do as he pleases with what is his own, so long as he does not thereby cause disadvantage to people generally (利己而毋損於人). The assurance that such rights will be protected by the government is a great encouragement to production of all kinds. Since society and government may help indirectly to produce wealth, we may call them AUXILIARY AGENTS OF PRODUCTION (生財輔助之法).

The government can help to make the people EFFICIENT physically, intellectually and morally: especially by enforcing proper laws for the protection of *health*, by seeing that children receive a suitable *education*, and by *restraining* immoral practices.

Besides providing officers, of every grade, to carry out the laws within the country, most governments provide also an army and a navy to *defend* the country from foreign attack.

By regulating the coinage of money and establishing certain *systems* of weights and measures, the government makes it easier for men to carry on trade. By making definite rules in regard to such matters as the payment of debts and the fulfilment of contracts of various kinds, the government *gives confidence* and makes business men more willing to trust one another. This is a great help to commerce.

Governments usually establish systems of "*patents*" and "*copyrights*" and provide for the protection of "*trademarks*." This means that men who make inventions or write books or

produce famous commodities, shall be protected, for a certain period of time, from other persons who would like to steal away their profits. When a man finds a better way to produce wealth, he does not get all the advantage himself. Sooner or later, other people will share the benefit. But men, in their business, usually seek advantage for themselves; and they will try harder to find out better ways of producing wealth if the government will protect them in the enjoyment of it. This *freedom to do one's best* for one's self under the protection of the government, is a great help to production.

The government may encourage the DEVELOPMENT of the country's resources. Extractive industries are helped by imposing "*tariffs*" upon foreign products or paying bounties upon native products. Manufactures may also be encouraged in a similar way. The transporting industries may likewise be encouraged, especially by making laws which give certain advantages to native shipping over foreign shipping. Such laws, however, may also *hinder* production by interfering with "economic freedom." They may also hinder the most productive "division of labor according to places."

The building of railroads, and other great works, may be encouraged by the grant of public "*franchises*," that is, the right to use public land; and also by laws which compel private land-owners to sell, at a fair price, any land that may be needed for such purposes.

Many governments have "scientific bureaus" in which the BEST METHODS of agriculture and other productive industries are found out and published for the benefit of producers. Reports from consuls and other officials in foreign countries are also published, describing new methods, opportunities for trade, etc.

Besides all these helps to industry, the government often carries on great public works itself, for the benefit of the people.

PART II

The Value of the Product

(物 値)

SECTION I

Wants, Utility and Demand

The word "want," in economics, means a need or a *desire* for something. Wants are in the mind of a man and depend much upon his feelings. A man's desire for a certain thing may be stronger at one time than at another time. At one time his most urgent want may be for this thing and at another time for that thing. At any particular time there is something that would probably give him more *gratification* than anything else he could get at the same price. The amount of gratification that a man can get from something may be called the UTILITY of the thing to him.

"The utility of a thing" has reference to the amount of gratification it can give to A PARTICULAR PERSON. Different men have different ideas and tastes; some have stronger desires for one thing, others for another thing. We therefore cannot talk about the utility of a certain thing to "people generally"; but we can consider people as arranged in various *classes* according to whether a certain thing has *great or small utility* to them.

Most men cannot get everything they want, because they cannot afford it. If a man has a certain amount of money to spend, he will usually think of several different ways in which he might spend it. If he wants several different things but can only afford to buy one, which one will it be? Naturally it will be the one which he wants most strongly,—the one which will give him the GREATEST AMOUNT OF GRATIFICATION,—the one which has the greatest utility for him.

Gratification here means not merely the enjoyment of pleasure or happiness. It means that a want is satisfied, or partly satisfied, and it may be ANY SORT OF WANT. A man

may sometimes want unpleasant medicine more than he wants delicious fruit. Or, he may want to give pleasure or benefit to others, as when a man provides for his family. Thus, also, the "utility" of a thing means not merely "usefulness" but any capacity to gratify wants. (The word "thing" here signifies "whatever may be wanted.")

When a man wants a thing and buys some of it, this may give him a good deal of gratification. It satisfies at least a part of his desire. If, now, he buys some more of it, this may also give him considerable gratification, but probably not so much as the first amount gave him, because his want, being already partly satisfied, was not so strong as at first. If, presently, he buys another additional quantity of the same thing, the gratification it gives him will probably be still less. The more he has of it, the weaker, or less urgent, is his want for an additional quantity. If the amounts that he got, of the thing, were all equal, we may call them *units* of the thing. Each successive unit of a thing may therefore, in general, be said to have less utility to the buyer than the preceding unit. That is, the thing has a DIMINISHING UTILITY to him.

Some things are absolutely necessary for men to have: in places where rice is the principal part of people's food, everybody must get enough of it to keep him alive. Some things are not absolutely necessary: instead of using oil for light, people might use other things or might even get along without. Let us consider something that a man ordinarily uses but does not absolutely need. In a certain period of time, he ordinarily buys a certain amount of it. Why does he not buy more of it? If he usually buys three units of it, why does he not buy a fourth unit of it? When he had already bought two units of it, why did he buy the third unit of it? We may imagine that he says to himself: "This third unit is WORTH THE PRICE,—but that fourth unit is NOT WORTH THE PRICE—to me; I can spend the money for

something else that will give me more gratification than that fourth unit." The utility, to him, of another unit of the thing, is not so great as the utility of something else that could be bought with the same money.

Since money can be used to buy anything that can be bought, we may consider money as representing things. To any particular person, therefore, a certain amount of money will represent a certain amount of utility, and the *utility of the money* to him means the utility of the things which that amount of money would buy. This man, who buys only three units of this thing, does not buy the fourth unit of it because the utility is not so great as the price which has to be paid for it. The utility of the first units that he bought may have been much greater than the price. His buying stops when the utility becomes less than the price. The last unit that he buys may be called his *marginal purchase*, because it is nearest his BORDER-LINE BETWEEN BUYING AND NOT BUYING. The total amount that he will buy at that price may be called his *total purchase*.

If, when this man comes to buy, as usual, he finds the price lower than before, what happens? He usually bought three units only. But if the price has fallen until *the price does not exceed the utility* of the fourth unit, he will buy four units of the thing, this time.

If, on the other hand, he finds the price higher than usual, he may decide not to buy as many units of the thing as usual, because now *the price exceeds the utility* of the third unit to him.

Thus a person's *marginal purchase changes* when the price changes; and it is easy to see what will be the effect upon his "*total purchase*."

We might arrange all the people of a certain place in *groups* according to the amounts of their "total purchase" of a certain thing, in a certain period of time, at a particular

price. If, now, we multiply the number of units purchased by one person in each group by the number of persons in that group, we shall know the "total purchase" of each group. Then, by adding these totals, we may find out the WHOLE AMOUNT BOUGHT. Divide the whole amount bought by the whole number of people, and we have the average total purchase of one person. The whole amount bought would then be the same as if every person bought just this average amount. Perhaps there is a person who does buy just this average amount;—then he may be regarded as "the average man."

The whole amount of a thing that will be bought by the people of a certain place, in a certain time, at a particular price, may be called the DEMAND OF THE COMMUNITY. It may be regarded as the result of multiplying the total purchase of "the average man" by the number of people. When the *price rises*, the average man's total purchase tends to become less; that is, the demand of the community tends to become *less*. When the *price falls*, the average man's total purchase tends to become greater; that is, the demand of the community tends to become *greater*.

SECTION II

Efforts, Cost and Supply

We have been considering the utility of the thing to the buyer (or user) of it. We must now consider its utility to the SELLER (or PRODUCER) of it.

Anything that is bought and sold may be called a *commodity*. A commodity's UTILITY TO THE SELLER (or producer) consists in its capacity to bring him money (or value) in exchange. When he considers that the price offered is less than the amount which this commodity ought to bring, he is not very willing to sell,—that is, he will not sell (or produce) so much as he otherwise would. When he considers that the price offered is greater than what he might reasonably expect, he is inclined to produce (and sell) more. In short, he compares the utility of the commodity with the utility of the price-money, just as the buyer does, but with the opposite intention.

We must now consider some causes that make a seller willing to sell at a certain price and unwilling to sell at a lower price. Commodities are usually produced by the "co-operation" of several different agents of production. If, in producing a certain commodity, a man has used a certain amount of natural materials, a certain amount of labor and a certain amount of capital,—he will add up the cost of these various agents of production. The sum may be called the COST OF PRODUCTION; and the price that he would be willing to accept must be at least as great as this "cost of production."

We may express the meaning of "cost of production" in another way. Nearly everything that is used in production has been made usable by labor. That is, everything that is produced is, either directly or indirectly, largely the result of labor. Labor requires *effort;* and in productive

effort, there is usually some *discomfort*. Men may enjoy play; but steady work is irksome. It makes them tired. In summer it makes them unpleasantly warm. If they have to work in the rain, they get wet. These feelings are not generally agreeable. If men could do just as they pleased, and make a living without effort, most men would work much less than they do. Since there is discomfort in productive effort, we may say that work has DIS-UTILITY to the worker; and the return that he expects to get from the product must be sufficient to overcome this disutility.

The cost of producing a certain amount of a certain commodity is not always or everywhere the same; this is because the cost of any particular agent of production, which is used, is not always the same. The cost of producing farm products on fertile land is less than on poor land. The cost of manufacturing with good machinery is generally less than with poor machinery. In both these cases the chief direct cause of the difference in cost is the difference in the amount of labor required to produce a certain amount of the commodity. The producer to whom the cost is more, is producing at a GREATER DISADVANTAGE.

At any particular price that may be offered for a commodity, those producers who can produce it at the lowest cost are more willing to sell than those whose "cost of production" is greater. The greater the *excess* of the price over any particular producer's costs, the greater is the *inducement* to him to sell. Therefore, the higher the price, the greater will be the AMOUNT OFFERED for sale.

The amount of a commodity which is offered for sale, at any particular price, may be called the SUPPLY of that commodity.

SECTION III

The Market Price

Wherever buyers and sellers meet is a MARKET. In a market there are usually a number of different persons who wish to get a particular commodity, and a number of different persons who have it for sale. Since the utility of this commodity is greater to some of the persons who want it than to others, some of them would be *more willing to buy* at a high price than others. The cost of producing it has likewise been less to some producers than to others; or, some of the persons who have it, may be particularly eager to get money in exchange for it; that is, the utility of money is particularly great to them just now; so they would be willing to give more of the commodity for a certain amount of money than some others would; that is, they would be *more willing to sell* at a low price than others.

If an eager buyer (Mr. B.) should offer a particularly high price, many owners would be willing to sell; that is, a large amount of the commodity would be offered to him—much more, probably, than he would buy; some of the stock offered would have to be sold afterward at lower prices. If an eager seller (Mr. S.) should offer to sell at a particularly low price, so many persons would want to buy that he could not supply them all; and some would have to buy from others at higher prices. Now, Mr. B. might have got all he wanted at a lower price by *waiting a little;* and Mr. S. might have sold his stock at a higher price if he had waited a little: and in fact, in an actual market, this is practically what happens. When several owners offer to sell to the eager Mr. B., they will *bid against one another*,—that is, one will offer to sell at a lower price than another, because he can do so and still get a greater return than he would ordinarily expect. When several persons offer to buy

from Mr. S. at the low price which he has named, they will begin to bid against one another, offering higher prices, because the utility of the commodity to them will still be greater than the price that they would pay.

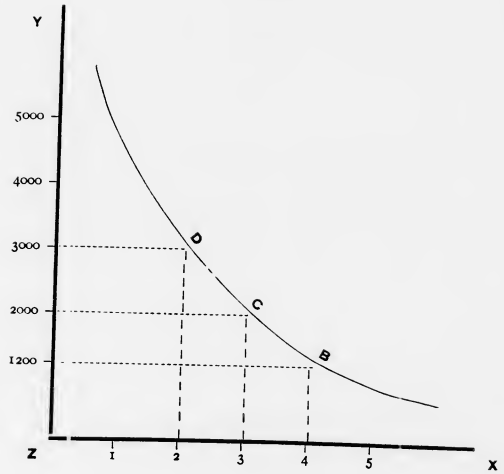
Here we find two opposite tendencies. The COMPETITION of those who want the commodity, tends to make the price higher than that which an eager seller would accept. The competition of those who have the commodity for sale, tends to make the price lower than that which some buyers are willing to give. These two tendencies bring the price to a MIDDLE POINT. Since the bargaining is usually done before any sales are made, the actual price paid will usually be about the same for the whole market. This price may be called the MARKET PRICE.

Different producers will thus get different benefit by selling. If a man's cost of production was small, his *surplus* return will be rather large. For some producers, the price will be *just enough* to repay the cost of production. Those whose cost of production is greater than the price, will not sell. They will wait until another market day, if possible; and if the price does not rise they will *quit producing*.

The market price of a commodity is the price at which the amount offered for sale is just about equal to the amount wanted. At the market price, SUPPLY AND DEMAND BALANCE EACH OTHER. We cannot say that this is ever precisely the case. In practical life, supply and demand are always changing more or less; and if the price of a commodity remains unchanged for a considerable time, it is because dealers find that it is more convenient to fix it themselves than to have it continually changing. But if they fix it too high or too low, *free competition* will force it back toward the point where supply and demand are equal.

Diagrams illustrating
Demand, Supply and Market Price

Fig. 1

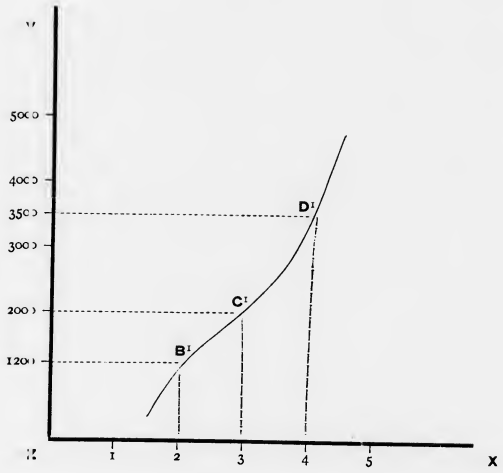


Figures I, II and III, all have reference to a certain commodity, in a certain place and a certain period of time, say a market day.

Let the distances on Z X represent various prices and let the distances on Z Y represent various amounts of the commodity. If the commodity be oil (petroleum), the numbers on ZX may indicate the price per case, and then the numbers on ZY will indicate the number of cases.

In Figure I, the curved line represents the course of demand; it is constructed by first locating two or three points, such as B, C, and D. These points are located by first ascertaining, as nearly as possible, the number of cases that will actually be taken at certain prices and then drawing lines to project the corresponding distances, respectively, upon a common point. In doing this, we first estimate, from market reports, that about 2000 cases would be taken at $3 per case, about 3000 cases at $2 per case and only about 1200 at $4 per case. Locating these points on the diagram as explained above, we draw a curve to connect them and we continue it in the same form. The form and position of the curve show that as the price rises, the demand grows less, and *vice versa*. The curve having once been determined, we may estimate the demand at any particular price, by first constructing a perpendicular from the proper point on the price-line, and then dropping a perpendicular to the amount-line from the point where the first line meets the curve.

Fig. II



In Figure II, the curved line represents the course of supply. It is constructed by the same methods as in Figure I. Here the form and position of the curve show that as the price falls, the supply grows less, and *vice versa*.

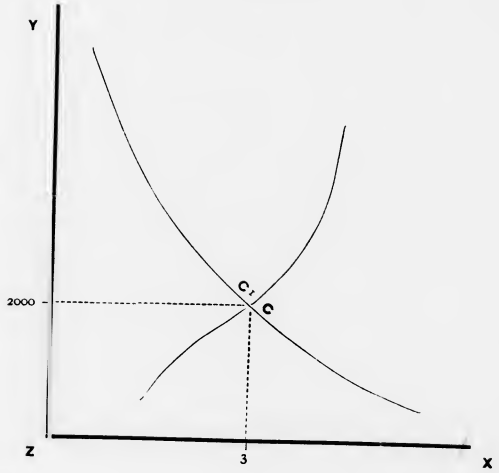
NOTES on Figures I and II:—The lines made up of long dashes are regarded as the original construction lines: those made up of dots, are the resulting construction lines. The difference is made, because the price is regarded as the cause which leads to a particular demand and to a particular supply. That is, price is regarded as *cause*, and demand and supply are regarded as *effects* of this cause.

The precise forms of the two curves, depend upon circumstances. In this case, the demand curve has a *regular* form, and the supply curve has an *irregular* form. The upper part of this demand curve indicates that if the price became very small, people would use very large amounts of oil: probably they would begin to use it instead of coal and wood for cooking, and for driving engines. The lower part of this demand curve indicates that even if the price became very great, there would still be some people who would use oil.

The upper part of this supply curve indicates that there is much oil to be had, and that, at high prices, large amounts would be offered for sale: probably dealers would hasten to bring it from other places, to sell here. The lower part of this supply curve indicates that if prices became rather small, the amounts offered for sale would quickly become less. The *direction* of this curve, at the point where we leave it, indicates that if the price should become a little less than this, no oil would be offered for sale,—that is, the supply would be 0.

The difference between the form of the demand curve and the form of the supply curve, when both approach the lower base line, is important. The demand curve tends to continue, because it is impossible to fix a limit to the *utility* that a thing may have for some one who wants to buy it. The supply curve tends to come to a finish, because nobody is willing to sell unless he can get back at least his *cost of production*.

Fig. III



In Figure III, the two curves are constructed upon one diagram. The point, where they meet, indicates the position of equilibrium of supply and demand. By dropping perpendiculars from this point to the two base lines, we may ascertain the ideal price at which supply and demand are equal, and the ideal amount that will change hands at that price. This point of equilibrium indicates, theoretically, the actual transactions of a market day, for this particular commodity.

PART III
The Sharing of Value
(分 財)

PART III

The Sharing of Value (分財)

THE MEANING OF DISTRIBUTION

If several men work together to make something, for which a certain amount of money is to be paid, they will expect to *divide* the pay among themselves. If, however, they also furnished the materials to make the thing, these must also be paid for. If, in addition, they used some-one-else's tools to do the work, a part of the pay will probably have to be given to the owner of the tools, in return for the use of them. Besides these shares, there may be others. If another man had engaged these workmen to do the work and had made all the arrangements for selling the product, etc., he would also have to receive a share of the value. And, besides all this, something would have to be paid for the use of the place where the work was done. So the value of the product would be divided up AMONG THE VARIOUS AGENTS OF PRODUCTION.

The share of value received in return for the *organization of industry* may be called profits,—for the *use of capital*, interest,—for *labor*, wages,—and for the *use of natural sources* of wealth, rent. These shares are not always easy to distinguish,—but the meaning of them is clear. Besides these REGULAR SHARES, there are IRREGULAR AMOUNTS which may be regarded as returns for the help which production receives from society and government. The returns to *society* are chiefly voluntary, such as gifts of charity; the returns to the *government* are chiefly compulsory, in the form of taxes. These two irregular returns need not be considered here.

Sometimes one person may, himself, represent various agents of production. The several shares must still be considered, however, as paid not to particular persons but *for the use of particular agents* of production.

Sometimes the very thing that has been produced may, itself, be divided up among the various producers; but ordinarily, it is only the *value* of the product that is shared. Even this is not actually done, in most cases. For instance, the wages that are paid to a workman are usually paid out of money that has been received for a previous product.

In some other ways, also, the *facts* of "distribution" are different from the *theory*. Very often the amounts of wages and interest to be paid are fixed beforehand, before the product has been sold,—that is, before its actual value is known. Nevertheless, these amounts depend partly upon some one's *estimate of the value* of the product; and if the product usually proves to be more valuable than was estimated, these amounts will tend to increase *in the future*.

Although it is not easy to say exactly how the value of a particular product will be distributed, it is easy to see that the whole value is distributed in some way. If we add up the total value of all the products of a certain country during a considerable period of time—say, one year—we may then say that this is about the amount of value that will be distributed in a year. (Of course it would be necessary first to subtract the value of goods that were destroyed, as by fire or flood, without being used). This total product may be called the country's yearly DIVIDEND, because this is what *must be divided up*.

We may sum up these general statements thus: The SIZE OF THE SHARES, in distribution, depends, first, upon the value of the product: because, if there is a larger *dividend*, while the "divisor" remains the same, there will be a larger *quotient*. The SHARE OF THE PRODUCT, received by any particular agent of production, depends upon how much of this particular agent is wanted for use and how much of it can be got for use: that is it depends upon the relation between the *demand* for it and the *supply* of it.

The *want* for any particular agent of production, corresponds to the *utility* of it for particular purposes in production. When a certain piece of work can be done either by one agent of production or by another, that one will be used which is *the more productive*. Cotton yarn can be spun either by using costly machinery and little labor or by using simple machinery and much labor. The first plan requires more capital; the second plan requires more labor. If the first plan is followed, a larger share of the product will be paid as interest; if the second plan is followed, a larger share of the product will be paid as wages. The person, who is planning the work, will choose the plan which is *the more profitable* for him,—that is, the plan which will make the cost of production, of a particular amount of cotton yarn, as small as possible. These considerations make up what may be called the DEMAND PRICES for the use of various agents of production.

The SUPPLY PRICES of various agents of production depend, similarly, upon the effort, expense, or general *disutility*, of furnishing them for use.

The resultant of these two influences, that is, the MARKET PRICE paid for the use of any particular agent of production, represents the SHARE of that agent.

We must now consider the particular application of these principles to the shares of the various agents of production. In doing this, it will be important to refer continually to the corresponding topics in Part I, as well as to the general principles of value in Part II.

SECTION I

Profits for the Organization of Industry

The man who sets up a business and carries it on, usually expects to get a return which is somewhat different from ordinary payments for the use of capital and for labor. He may use his own capital, and he may also work; but he expects to gain more than he would gain by simply loaning his money to some-one else and working for some-one else. The EXTRA GAIN that he gets may be called profits.

If a man borrows capital and hires laborers, to do business, he usually agrees, beforehand, what amount of interest and wages shall be paid. He also pays for raw materials at prices that are fixed before these materials are used. If he buys machinery and uses buildings, the cost of all these is generally settled before the value of the product is known. If there should be a strong demand for the product, the price may become higher than usual; then there will be more value to be divided. But since most of the other shares have been fixed beforehand, most of the advantage of this increased value goes to THE MAN WHO IS CARRYING ON THE BUSINESS. The amount of his profits is equal to the difference between the *total value* of the product and the *net cost* of producing it, which includes interest, ordinary wages and other expenses.

If, when the product is sold, its value is much less than usual, there may be loss instead of gain. This loss is suffered directly by the man who is carrying on the business. Other agents in production may also suffer loss indirectly, in such a case. But the immediate loss falls upon the man who undertook the RISKS OF THE ENTERPRISE. He is sometimes called the *entrepreneur*.

The extra gain is sometimes due chiefly to *good fortune:* something unexpected may occur to make the value of the product unusually great. In such a case, profits might be

regarded merely as a return for such qualities as COURAGE AND STEADINESS in undertaking the risk. The man who "took the chances" gets the gain.

Generally, the extra gain is chiefly due to careful thought, planning and management. Since these all require effort,—that is, labor,—the extra gain is sometimes called *wages of management.* In this sense, profits might be called *contingent wages,*—that is, wages which depend upon an uncertain event. Such "wages" are usually high, not only as a payment for the risk of loss, but also because the work requires, in a high degree, a COMBINATION OF QUALITIES which is not common: such as good judgment, prompt decision, energy, tact, alertness of mind and general intelligence.

Large enterprises are often carried on by *joint-stock companies.* Since the stock-holders cannot all take part in actually managing their business, they usually appoint a few members of the company to direct the business; then these few *directors* engage one or two *managers* to plan and manage all the details of the business. In such a case the manager's salary may be fixed beforehand; but it is based on an estimate of what will probably be the profits. The manager's salary thus consists partly of PROFITS SET APART BEFOREHAND.

The man who has invested his money in a joint-stock company, shares the profits. When his profits are not a mere matter of good fortune, they may be regarded as A RETURN FOR THE CARE AND GOOD JUDGMENT which he exercised when he *chose a good business,* in which to invest his money;—and also for the part which he takes in *directing the policy* of the company.

Profits depend partly upon the relations of demand and supply. If the number of those who are able and willing to undertake extraordinary responsibilities is large in proportion to the opportunities of gain in business, then the average of profits is likely to be small;—and *vice versa.*

SECTION II

Interest for the use of Capital

Interest is what is received by the owner of wealth in return for giving up the *present use* of it. Wealth, as we have seen, is accumulated by labor and abstinence. The object of labor is to produce something which will gratify, either directly or indirectly, the wants of the laborer. If, after producing a certain amount of wealth, the laborer has to wait a long time before he can enjoy the results of his efforts, this waiting is an additional disutility to him. What he can use or enjoy *now* is worth more to him (that is, he would rather have it) than what he can enjoy *a year later*. Therefore, if another person wishes to use this man's wealth now, he must offer this man something to repay him for the DISUTILITY OF WAITING.

The "cost of production" of capital consists chiefly in this disutility of waiting. The interest which is paid must therefore be at least enough to *overbalance this disutility*. The interest offered may be much more than this, according as the present use of this wealth has *utility to the borrower*.

When the owner of wealth uses it in business, himself, or invests it in a joint-stock company, he usually reckons a part of his profits as interest. In such a case, *interest and profits*, taken together, are sometimes called gross profits.

When the lender feels perfectly sure that he will get back what he loans, the interest is simply a payment for the use of wealth. This may be called *net interest*. When the lender fears that the borrower may fail to repay him, or anticipates trouble of some sort in getting back his principal or in collecting the interest, he hesitates to lend. Then a larger return must be offered, to induce him to undertake the risk or trouble. This larger amount includes ordinary

interest and a PREMIUM, that is, an extra payment offered as an inducement or for assurance. The total amount may be called *gross interest*.

No matter in what form capital may be, its value is reckoned in money. Money on which interest is paid is called the "principal." The "rate of interest" is the amount to be paid for a certain unit of money, during a certain unit of time. When wealth is invested in *fixed capital*, the interest-charge can be reckoned regularly—say by the year or by the month—in calculating the cost of a particular product. When wealth is invested in *circulating capital*, as in the payment of wages or in the purchase of raw materials, the interest charge on any particular product must also include a reckoning of the LENGTH OF TIME that elapses between the investment of this particular capital and the sale of the product. If only a short time is necessary to finish the product, and it is quickly sold, the capital is "turned over" rapidly, and the interest-cost is small. If it takes a long time to get the product finished for market, a larger amount must be charged for interest on the capital which was used in producing it.

The rate of net interest depends, in general, upon the relations of *demand and supply*. Where capital is abundant, as it usually is in large commercial cities, the rate of interest is generally lower than in farming regions. But there are many influences which affect the rate;—such as the *opportunities of profit* in trade and industry,—the *increasing wants* which come with increasing wealth,—the desire of some people to save wealth *for the sake of having it* or of keeping it for their children, even if the income from it be very small,—and the fact that capital is now sent from countries where it is abundant, to *all parts of the world*, for investment where the rates are higher.

SUMMARY OF SIMPLE INTEREST

We may consider that the COST OF PRODUCTION of a certain amount of capital is made up of two dis-utilities: (1) the dis-utility of *producing* that amount of wealth, and (2) the dis-utility of *keeping* it instead of enjoying it immediately. Now, the reward for the producing of it is the wealth itself; then interest is simply the reward for *not consuming it immediately*. Therefore the lowest amount of interest, that the owner will accept, is an amount which will repay him for the disutility of waiting. This makes the ordinary *supply price* for the use of capital.

Likewise we may consider that the UTILITY of a certain amount of capital (to a borrower who must pay it back afterward,) is equal to the *increase of product* which he can get by using it in industry. The productiveness of capital is the true *source* from which all ordinary interest comes. The amount of interest, which the user of capital is willing to pay, may be almost as much as this increase in product which is due to the use of capital. This makes the ordinary *demand price* for capital.

The ordinary MARKET RATE of interest would thus be the resultant of these two tendencies;—but there are *special circumstances* which affect the rate. Some men, as we have seen, are *eager to save for future use*, merely for the sake of having wealth stored up. The dis-utility of keeping it, unused, may be so small to them, that they would lend their money to a perfectly reliable man at an extremely low rate of interest. Also, some men, at some times, are so *eager to get money for immediate use*, that they are willing to pay much more interest for it, than they could expect to make by using it in industry.

Money represents *everything* that can be bought. It does not spoil by being kept. Therefore the utility of money,

to a man who has it or to a man who wants it, may represent all the EXTREMES OF UTILITY of *various commodities* both *present and future*. Accordingly, the price (interest), which is paid for the use of money, is liable to vary, much more than the price of any particular commodity.

SECTION III

Wages for Labor

We have already suggested the question of distribution as between labor in general and capital in general. We must now consider the question as to DIFFERENT BRANCHES AND GRADES of labor.

The relations of *demand and supply* are the chief influences that affect wages. If, in any particular branch and grade of industry, the number of men willing to work becomes greater than the number of positions for which workmen are wanted, competition will tend to make wages lower than before;—and *vice versa*.

In any particular branch of industry there are various GRADES of labor: some men are more skilled than others. While the number of *unskilled* laborers may be more than are wanted for this grade of work, the number of *skilled* laborers may be less than are wanted for that grade of work. In such a case the wages of unskilled or common laborers would tend to fall while the wages of skilled laborers would tend to rise. On the other hand, it sometimes happens that there is a particular need for laborers who have physical strength, rather than for those who have skill. Also, it sometimes happens that the number of persons who are able to do work which requires much training, exceeds the need for them; but such conditions are not likely to continue very long.

We have been looking at the matter from the point of view of the utility of labor. We must now consider the other side of the matter, namely, COST OF PRODUCTION. One of the reasons why higher wages are usually paid to skilled laborers is that it usually costs time, trouble and expense to become skillful; if the wages were not high enough to *repay the outlay*, the supply of skilled laborers would gradually become less, until there were not enough of them to do work

for which they are wanted: then wages would rise again. In the same way, one of the reasons why unskilled laborers often get low wages is, that there has been *no especial outlay* to prepare them for their work.

Let us think of different kinds of labor which we have seen. We very often see men who receive the lowest wages doing very *toilsome* work; while men whose work is *easy* and pleasant often receive much higher wages. There are special reasons for this condition of affairs. One reason is, that poor men must work, day by day, for whatever wages they can get. They cannot keep their labor until another market-day. To-day's labor MUST BE SOLD TO-DAY or it is lost forever.

Nevertheless, there is a *limit* to the fall of wages. A man's wages may not be enough to buy good food and clothes;—but they must be enough to buy some food and clothes—enough to keep him alive. The things which are needed for this purpose may be called NECESSARIES FOR SUBSISTENCE. This expression ordinarily means not only enough to keep the laborer himself alive, but also to keep his family alive. Otherwise, the population will be less in the next generation.

When wages increase, laborers may be able to buy not only the necessaries for subsistence but also things which are needed to keep their bodies *strong and healthy*. They may then, also have more leisure to think and to read, and thus become more *intelligent*. All these things tend to make men more *efficient*; and men cannot do good work unless some of these higher needs are satisfied. Such things may be called NECESSARIES FOR EFFICIENCY. This grade of necessaries includes some provision for the *education* of the laborer's children. If children are well trained, the next generation may be still more efficient. When a certain group of people become accustomed to a higher grade of "necessaries" than another group, they are said to have a HIGHER STANDARD OF LIVING.

A laborer's REAL WAGES are not the amount of money he receives, but the amount of commodities which the money will buy. The amount of money, which he receives, may be called his *nominal wages*. A laborer's nominal wages may remain unchanged, but if the prices of things, which he ordinarily uses, become higher, then his real wages are lower than before;—and *vice versa*.

Skilled laborers in one branch of industry cannot usually CHANGE very easily to another branch of industry. Their skill is *specialized*. On the other hand, common laborers, whose work is chiefly *muscular*, might be employed in any one of several branches of industry. This gives the skilled laborer the advantage of a sort of monopoly when there is a large demand for labor in his branch of industry; and it puts him at a disadvantage when he tries to find employment in some other branch of industry. With the common laborer the case is just the reverse. Where *machinery* is much used, however, the distinction between different branches of industry becomes less important.

In a progressive country, wages tend gradually to become *higher*. This is partly because there is more wealth produced—partly because there is a higher demand for skilled labor,—partly because children are given a better education, and thus each generation may become more efficient than the last. When most of the people become more intelligent, then laborers of lower grades, or their children, are likely to *rise into higher grades;* more machinery is invented, to do the hard work; and the tendency is, that wages will be "LEVELLED UP."

Laborers sometimes fear the EFFECT OF MACHINERY UPON WAGES: if one man can do the work of many men, they think this may cause other men to be idle and to starve. If much machinery is brought into use suddenly, laborers will probably suffer, for a time. But the increased product will probably make *lower prices for commodities*; while the increase in trade will cause a *new demand for laborers* in other kinds of production; more commodities will be consumed, and so there will be an *increasing demand for labor*, even in the industry where the machinery is used: thus wages, both real and nominal, will finally tend to rise.

NOTE:—Adam Smith suggests five kinds of SPECIAL CIRCUMSTANCES which modify rates of wages,—as follows: "(1) the agreeableness or disagreeableness of the employments themselves; (2) the easiness and cheapness, or the difficulty and expense, of learning them [—see above]; (3) the constancy or inconstancy of employment in them; (4) the small or great trust which must be reposed in those who exercise them; and (5) the probability or improbability of success in them."

SECTION IV

Rent for the Use of Land

Different pieces of land have DIFFERENT PRODUCTIVENESS. The more productive pieces are first occupied and cultivated. Some of the less productive pieces, being also needed, are also cultivated. There is *competition* among farmers (cultivators) to get the use of the more productive pieces. The owners of these pieces of land will let them to the highest bidders. When all the better grades of land, that are needed, have been let, then there will be almost *no competition* for the poorest grade that is needed.

Since the better-grade land is more productive than the poorer, then a man, who is using poorer-grade land, will prefer to use better-grade land if he can get it. Since he could get a greater product from the better-grade land, by the same amount of effort, he would be willing to give the owner of the better-grade land a large part of the extra product, in return for the right to use the better-grade land. But the present user of this land also wants to keep it: and in order to prevent the landlord from letting it to the other man, he will have to offer the landlord AS MUCH AS THE OTHER MAN OFFERS.

The man who is using the poorest land is one of the competitors (bidders) for the use of that better-grade land. Even a small increase in his profit would be better than none. He will therefore offer the owner of the better-grade land almost all of the extra profit which he could get by using that land;—that is, he will offer him nearly the whole difference in product, of the two pieces. Now, any other person who wants to use that land would have to offer as much for it as this man offers. So, in general, any man who wants to use a particular piece of land would have to give

the owner of it an amount about equal to the difference between the product of *that piece of land* and the product of *the poorest land* that is in use. This difference may be called the SURPLUS PRODUCT. It is the DIFFERENCE between the product of any particular piece of land and the product of the least productive land that is in use. The effect of competition among farmers who want the use of better-grade land is, that *this whole surplus tends to go to the landlord.* This surplus is what is called *economic rent.*

The poorest land in use may be said to be at the *margin of cultivation.* This means that the product, which this farmer can get, is just enough to repay his COSTS OF PRODUCTION. In the theory of rent, there will always be some such land. This cost of production must cover all wages and interest which need to be paid, including the ordinary "*necessaries*" of the farmer. The reason why the return, from the poorest land used, will not be more than this cost of production, is, that there will be *competition* among farmers, to sell their products. Those who are using better land, can afford to sell at any price which will give them a profit. Hence the price tends to fall until the *price is no greater than the cost of producing that part of the supply which is produced at the greatest disadvantage.*

In what has been said, we have supposed that the various pieces of land were all of equal size,—say one mow in each piece,—and that the amount of labor and capital used was the same on every mow of land: then the difference was simply in the *amounts of product.* It is easy to illustrate these principles by assuming certain amounts of product—say of rice or wheat—on different pieces of land, and thus calculating the economic rent.

It is more practical, however, to take a certain *unit of product,*—say, one picul of rice,—and calculate the difference in amount of labor and capital needed to produce it, from

various grades of land. Then we can see clearly that the rent of land depends upon the *different costs of production* of a certain amount (or value) of product. On the poorest land used,—that is, the land which is at the margin of cultivation,—the cost of producing one picul of rice is just about equal to the value of it. On better-grade land, the cost of production is less; and the economic rent on every picul of rice, on whatever land produced, would be the DIFFERENCE BETWEEN ITS VALUE AND THE COST OF PRODUCING IT. The land on which value and cost of production are equal, is called *no-rent land*, because the difference is 0.

We have said that the land which is used, is all needed. By this we mean that if less land were used, the product would not be enough to satisfy the wants of the population. Now, the usual market price must be at least as great as the seller's cost of production; and since, in this case, the whole product is needed, the *price must be at least as great as the cost of production on the poorest land in use*. If the population should become less, some of the poorest land would not be needed; then the margin of cultivation would become higher; prices would fall; and *rents would become less*. When the population is increasing, there is need of using poorer and poorer land. Then *rents become higher*. There is thus an important connection between INCREASE OF POPULATION AND RENT.

The productiveness of a piece of land means not only its *fertility*, but also its *convenience*. Production, as we saw in Part I, includes transportation. Cost of production means the *whole cost* of the commodity *when it reaches the market*. IMPROVEMENTS IN TRANSPORTATION, such as the use of steamships and railroads, *lower the cost* of production for commodities that are sent to a market from distant places:—the rent of land in such places therefore becomes *greater*. Improvements in transportation also *widen the region* from

which the people of a certain place may get their necessary supplies:—then the people of such a place do not need to use their poorest lands, and rents there will become *less*.

The productiveness of land may be increased by IMPROVEMENTS IN METHODS OF AGRICULTURE. Such improvements are generally the result of using more skill or more capital or more care in planning the work. A part of the increased product, therefore, is taken by the farmer as additional *wages*, *interest or profits*. When such shares become unusually large, however, there will be more competition for the use of land, and a larger rent will then be taken by the landlord.

This leads us to note the DIFFERENCE BETWEEN RENT AND PROFITS. We have seen that profits are an extra gain, or surplus; and rent is also a surplus. How can there be both rent and profits? Profits are sometimes considered as a sort of rent, but not as a rent on land. Rent on land is an *ordinary surplus* which depends largely upon the *resources of nature*. Profits are an *extraordinary surplus*, depending largely upon *men's abilities*.

We have been talking of rent as if the landlord actually received the whole surplus. This is the actual TENDENCY;—but it is not usually the actual FACT. There are many causes which interfere. It is not convenient for a farmer to change farms frequently, even though he could make a larger profit by changing. It is convenient for the landlord to agree upon a certain amount of rent to be paid by the farmer, for several years ahead, even if it is less than what he might get by calculating the value of the product, year by year. Men generally enjoy *certainty* and *permanence*, and are willing to give up some possible gains to secure them.

The principles of rent apply not only to agricultural land but to land used for *other purposes*. The productiveness

of land used as a place of *business* depends chiefly upon its situation. The rent of land used for *residence* depends upon several things: such as the convenience of the location for men who wish to live *near* their places of business,—the productiveness which the land *might have* if it were used for business purposes,—and the *attractiveness* of the location to men who can afford to pay for it. *Rents in large cities* are often extremely high. Rent may also be paid for the use of *natural agents of any sort*, which may have come under the control of individual men,—such as the power furnished by a waterfall.

The amount of money paid for the use of land which contains *mines*, or *stone-quarries*, is not merely rent but partly also a *purchase-price;* because, when the minerals or stone shall have been taken from such land, most of the value of the land will have disappeared.

When a man buys a piece of land and keeps it for his own use, he is *his own landlord*, and gets the benefit of the rent, himself. If he buys it for the purpose of letting it out to some one, for a *rental*, then the amount of the purchase-price, which he is willing to pay, depends upon how much *interest* he could get by using that money in industry or by loaning it. That is, the land is bought as an INVESTMENT. This method of reckoning the value of land with reference to the interest which could be got on the purchase-money, is called the *capitalizing* of rent.

The price of the product, as we have seen, does not depend upon rent,—but the *rent depends largely upon the price*. Cost of production, also, does not depend upon rent: the rent depends *partly upon the cost of production*. In *practice*, however, when rent is fixed, the producer reckons rent as a part of his expenditure, in calculating his cost of production.

Men sometimes speak of "renting a house," but this is not an accurate use of the term "rent." Rent may be given for the use of the land on which the house stands; but the *house* itself represents an investment of *capital*. What is paid for the use of the house, therefore, is properly interest. Likewise, if the owner of agricultural land has made *permanent improvements* of any kind upon it, the so-called "rental value" of the land is partly *rent proper* and partly *interest*.

Summing up this topic, we may say that rent, in general, is a payment for the use of natural agents. Some natural agents are FREE,—such as (usually) the air, the ocean, rivers and the light and heat of the sun. A man cannot ordinarily take possession of these, except in so far as he is actually using them. Other natural agents, especially land, have generally been APPROPRIATED; that is, some men call them their own. A man may own much more land than he can use. Having got possession of it, he assumes the right to *let* the use of it to other men. In return for this *permission*, he demands a part of the product. This share of the product, which we call the landlord's rent, will be large or small, (1) according to the urgency of the WANT, which other men feel, for the use of what he claims; (2) according to the amount of VALUE, which their efforts can produce from it.

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